

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Withdrawn) A ceramic tube comprising:  
a ceramic containing at least one element selected from the group consisting of C, Ti, Zn, Sn, Al and a rare-earth element;  
a Cu compound; and  
a catalyst composed of at least one element selected from the group consisting of Fe, Co, Pt, Ru, Pd and La.
2. (Withdrawn) The ceramic tube according to Claim 1, wherein elementary ratio of said Cu compound to said catalyst is 1 to 0.5 in terms of Cu/catalyst.
3. (Withdrawn) The ceramic tube according to Claim 1 which contains one of Cl and Br.
4. (Withdrawn) A ceramic tube laminate having a structure in which a ceramic tube is laminated onto at least one side of a substrate and the ceramic tube grows two- or three-dimensionally from a core containing a metal or metal oxide and is connected to an adjacent core.
5. (Withdrawn) A ceramic tube laminate having a structure in which the ceramic tube grows onto at least one side of a substrate in the direction almost perpendicular to the substrate.
6. (Withdrawn) A ceramic tube laminate having a structure in which the ceramic tube of claim 1 is placed between at least two substrates.
7. (Withdrawn) The ceramic tube laminate according to Claim 4 which comprises a ceramic tube comprising:

a ceramic containing at least one element selected from the group consisting of C, Ti, Zn, Sn, Al and a rare-earth element;

a Cu compound; and

a catalyst composed of at least one element selected from the group consisting of Fe, Co, Pt, Ru, Pd and La.

8. (Currently Amended) A coating solution for producing ceramic tubes, ~~which contains~~ comprising:

at least one element selected from the group consisting of C, Ti, Zn, Sn, Al and a rare-earth element;

Cu compound; and

at least one metallic element selected from the group consisting of Fe, Co, Pt, Ru, Pd and La as a catalyst component; and

~~wherein an organic material containing C, N and O is-bound to the~~ at least one metallic element.

9. (Original) The coating solution according to Claim 8, wherein said organic material is of at least one type selected from the group consisting of phenolic resin, acrylic resin, epoxy resin, melamine resin and tetracarboxylic acid dianhydride.

10. (Currently Amended) The coating solution according to Claim 8 ~~which contains~~, further comprising at least one of Cl and Br.

11. (Withdrawn) A method for producing ceramic tubes comprising:

a coating step for coating a substrate with a hybrid coating solution comprising an organic material and metallic element;

drying step for drying the coated solution to form a film;

pyrolysis step for pyrolyzing by heat treatment the dried film in an atmosphere containing oxygen at a low content; and

oxidation treatment step for decomposing by oxidation the film

to produce hollow shapes in an atmosphere containing oxygen at a high content.

12. (New) The coating solution according to Claim 8, wherein the organic material is selected from the group consisting of polyamide, phenolic, acrylic, epoxy and melamine resin.

13. (New) The coating solution according to Claim 8, wherein the at least one metallic element is in a form of a salt or organometallic compound.

14. (New) The coating solution according to Claim 13, wherein the salt is a nitrate or chloride of the at least one metallic element.

15. (New) The coating solution according to Claim 13, wherein the organometallic compound is an alkoxide.

16. (New) The coating solution according to Claim 8, wherein the Cu compound is a promoter and is in a form of a salt or organometallic compound.

17. (New) The coating solution according to Claim 16, wherein the Cu compound is incorporated in the solution to have an elementary Cu/catalyst component ratio of 1 to 0.5.

18. (New) The coating solution according to Claim 16, wherein the Cu compound is copper nitrate or copper chloride.

19. (New) The coating solution according to Claim 8, wherein the coating solution consists essentially of the at least one element selected from the group consisting of C, Ti, Zn, Sn, Al and a rare-earth element, the Cu compound, the at least one metallic element selected from the group consisting of Fe, Co, Pt, Ru, Pd and La as the catalyst component, and the

organic material containing C, N and O bound to the at least one metallic element.

20. (New) The coating solution according to Claim 8, wherein the coating solution consists of the at least one element selected from the group consisting of C, Ti, Zn, Sn, Al and a rare-earth element, the Cu compound, the at least one metallic element selected from the group consisting of Fe, Co, Pt, Ru, Pd and La as the catalyst component, and the organic material containing C, N and O bound to the at least one metallic element.